Sachse Amateur Radio Association

SARA SKYWAVES

W5SRA

FEBRUARY 2019

MY CORNER OF THE SHACK

by John Smyder, W5JWS

Have you ever thought about how you can give back to the Ham Radio community? If not let me provide a couple of suggestions to get you thinking:

Volunteer to provide radio support for a community event: SARA is asked each year to help with events like the Wylie Rodeo, Cars Under the Stars, and other events to provide radio communication support at those events.

Become a member of RACES/ARES: This is pretty simple really. The requirements are – have a Ham Radio License, attend a Skywarn training session once every two years, and complete two FEMA courses online (ICS -100 & ICS-700). You can find both of these course at the Emergency Management Institute Independent Study site (https://training.fema.gov/is/). It is free but does require you sign up for a student ID.

Become a VE: You can do this through the ARRL as well as W5YI and then help with administering the exams for others to advance through the 'ranks'. Someone with a General license can help test Technician exams and those with Extra can do Tech, General, and Extra exams.

Become an 'Elmer': Find someone new to the hobby and help them advance their knowledge (it can help you too). The Board is looking for General and Extra license holders who might be willing to help us sponsor some study sessions for those looking to move from Tech to General or General to Extra. You would still be required to do some studying on your own and I have a few favorite tools that I will share here:

Books: https://www.easywayhambooks.com/about I really like this series of books, they fit my study style well (give me the facts, nothing but the facts ma'am). They present just the correct answers with none of the distractors and some helpful hints of how to help remember some of the more complex items. I like to combine

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REMEMBER!

NEXT SARA MEETING

Thursday February 27, 2020 at 7:30pm
Sachse Public Library Conference Room

Topic: SWR
Speaker: Jim Eatman – KG5WAW

JOIN US ON THE AIR

SARA Weekly Information Net
When: Weekly on Wednesdays, 8:00pm – 8:30pm
Where: N5LOC (145.250, PL 141.3)

SARA Simplex QSO Net
When: Every 2nd and 4th Tuesdays, 7:30—8:30pm
Where: 146.400 (Simplex)

The Sachse Amateur Radio Association uses the N5LOC repeater in Sachse, TX:

- Frequency: 145.25 MHz
- Shift: -600 kHz
- PL tone: 141.3

… or in person

SARA Eyeball QSO Breakfast
Each Saturday 8-9am (some start arriving at 7:15)
Where: 7320 TX-78, Sachse, TX

SARA Monthly Meeting
When: Every 4th Thursday at 7:30pm
Where: The Sachse Public Library,
3815 Sachse Road Sachse, TX

Continued from page 1

the book study with some practice tests too.

Practice test sites that I have use are:

Ham Test Online (my favorite thanks to its 'adaptive learning')

Ham Study is good also. The flash cards have explanations on the 'back' that you can look at after you have answered a question in study mode. It also has practice exams.

ARRL Exam Review for Ham Radio: I have not used this one but, heard good things.

There are others too but, this is just a few that I've used or read about.

If you are interested in helping us with some of those study sessions please let any board member know of your interest.

Talking about continued learning, we've got a number of folks who have been or are interested in learning CW. I was fortunate enough attend one of the first 'CW Boot Camps' that Beau Williamson, N5PY/SK taught before his passing. In that class we learned, very quickly, CW (I need to do a lot of remedial work by the way). The most important thing I took away from the class was the tool set. The primary tool that Beau used was a web site called "The Ham Whisperer - Morse Code Course".

I really liked the way KE4GKP presents the material. There is also CW Academy that a couple of our club members are using as well that I hear is very good also. So, if you want to join the ranks of those who are doing the original digital mode these are a great place to start. And I know that KG5WAW would be happy to do some 'slow code' with you as you get better are hearing CW.

I really look forward to seeing you at our next meeting on the 27th at the Sachse Public Library (7:30pm) where we'll have KG5WAW (Jim Eatman) present information on SWR to us with an example of how to use the nanoVNA as I understand. See you there.

73, W5JWS – John S

Thanks for all of the articles this month! I can put it all together but YOU make it Great!

Steve, W5SOT

UPCOMING EVENTS

Feb. 27 - SARA General Meeting
7:30pm at the Sachse Public Library. John Smyder is going to be presenting updates and options for a SARA Club repeater.

Feb. 22 & 29 – CERT Basic Training
8:30am-4:00pm at 3815 Sachse Rd, Building D, Sachse, Texas 75048

Feb. 29 – Hella Shrine Temple 5th Saturday Trade Days & Swap Meet
2121 Rowlett Road, Garland Texas, 75043 (Flyer on page 8)

Mar. 7 - FREE Ham Radio Tech Training Class
Class is from 8:30 - 4:00. Lunch will be provided. Exam 4:30 – 6:00.
Class is FREE, Exam is $15. North Pointe Church of Christ
7030 HWY 78 Sachse, TX 75048 (See flyer on next page!)

Mar. 12 - SARA Board Meeting

Apr. 18 Mentor Fest
The Garland Hella Hams and the ARRL North Texas Section would like to invite all current and prospective Hams to attend Mentorfest! 9:00am—4:00pm at the Hella Shrine in Garland. (Flyer on page 6)

May 16-17 MS 150
I will need a lot of HAMS and Non-Hams for different communications assignments. For non-hams, I need people to be on the route in event-provided vehicles. Please email j.marple@verizon.net for answers to your questions. It is an awesome event and lots of fun! (Flyer on Page 17)

June 12-13 - Ham Com
At the Plano Event Center

- One General Admission ticket is good for both days of the event.
- Online registration begins October 1, 2019 and ends May 31, 2020 at 11:59 PM.
- Online general admission tickets for adults are $8. Ticket prices are $10 if purchased at the event on the days of the event.
  (More info on page 10)

Ham Radio Tech Training Class

Saturday March 7th 2020
Class 8:30 - 4:00
(Lunch will be provided)
Exam 4:30 – 6:00

Training Class: Free

Exam: $15

North Pointe Church of Christ 7030 HWY 78 Sachse, TX 75048

Why a License?

You will learn which frequency bands are available for amateur radio and agree not to use other frequencies. It also requires that you learn radio etiquette so your operation on the amateur bands won't interfere with other HAM operators.

Prerequisites

1. Study the No-Nonsense Technician Class License Study Guide by KB6NU Dan Romanchik

Free PDF Version:
https://www.kb6nu.com/study-guides/

Paperback Version:
https://www.amazon.com/dp/0983221634/ref=cm_sw_em_r_mt_dp_U_bGGqEb2MBWGAG

2. Take the online sample exam several times:
https://hamexam.org/

In 1908, students at Columbia University formed the Wireless Telegraph Club of Columbia University, now the Columbia University Amateur Radio Club. This is the earliest recorded formation of an amateur radio club, collegiate or otherwise

You will need (for the exam):

- 2 forms of ID (one must have a picture)

- A copy of your 2 IDs

- A copy of your current license or CSCE (if you are upgrading to General or Amateur Extra)

- Pen and Pencil

- Calculator if desired (use of calculators in cell phones is prohibited)

- Testing fee of $15 (please bring cash)

Additional Recommended Online Resources

Tech class license tutorial videos:
http://dcasler.com/ham-radio/training/ ·
KB6NU's One-Day Tech Class:
https://www.kb6nu.com/study-guides/ ·
Question pool:
https://hamexam.org/
Technician (The 35 question technician license exam will be taken from this pool. (The answers will be in a different order.)
What is Ham Radio:
http://www.arrl.org/what-is-ham-radio

https://ww.hamradiolicenseexam.com/what-is-ham-radio.htm

SARA Repeater Fund Raiser

Who we are: Sachse Amateur Radio Association (SARA). We have members from our surrounding communities: Sachse, Wylie, Murphy, Garland, Rowlett and other local cities.

Why we exist: Amateur Radio, also known as **ham radio**, is the use of radio frequency spectrum for purposes of non-commercial exchange of messages, wireless experimentation, self-training, private recreation, radio-sport, contesting, and ***Emergency Communication***. We have events to support the community and teach our membership how to support the community both for emergency and non-emergency ways.

Events we support are: Sachse Cars under the Stars, Wylie Championship Rodeo, Sachse Fall Fest, Sachse Red White and Blue Blast, Monthly Sachse Outdoor Warning Siren testing and other events providing radio communication support and more.

How we practice being ready to support the community in an emergency: weekly and fortnightly having controlled radio nets both on a repeater and simplex radio networks so that in the event of an emergency we can respond with communications if needed.

Why is this important: In the event of a disaster (natural or man-made) cell phone towers may go offline, Police and Fire communications also might go offline or be overwhelmed with calls. **Amateur Radio** is a backup solution in the event of an emergency. An example of this was Puerto Rico in the wake of Hurricane Maria. Most of the island lost power and phone coverage (both land line and cell phone were out). The Red Cross contacted the American Radio Relay League and requested help, "We need 50 of your best radio operators to go down to Puerto Rico.". See https://www.cnn.com/2017/09/27/us/puerto-rico-maria-ham-radio-operators-trnd/index.html for more detail. Now we are not going get hit with a hurricane here in the SARA north Texas area but we could be and have been hit with tornadoes, and large hail storms that have done a lot of damage and have in some cases knocked out communications in the process.

What are we trying to accomplish: We are trying to raise money to setup a Sachse Amateur Radio Association owned Radio Repeater. This will give us greater coverage of the local area in the event of an emergency. We have been slowly saving club finds to afford a repeater, but we are a small club, and to date we have not reached out to the local community for assistance. Until recently there have be privately owned repeaters available, but recently one of those repeaters went offline permanently, another has been having issues with interference for technical reasons. So, we are feeling the pressure to get a new repeater online in the community to have good coverage in the event it's needed. We have found a local church that is willing to house the repeater and provide power and 24-hour access to the repeater in the event of problems.

How you can help: You can donate to our fund-raising drive, and since we are a 501c3 charitable organization we can give you a receipt that can be used with the IRS. Even small donations will help, if 100 people donate $20 that would help pay for the necessary antenna to cover the community. If 200 people were to donate $40 each, we could afford to put up a tall tower and purchase an even better radio then planned which provide even better coverage for the community on what, right now, is our shoe string budget. It's really up to you, will you help us to help you in the event of an emergency? If so please donate! If you would like more info please contact one of the Board members or email David Mandala at treasurer@sachseradio.org

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1 An **amateur radio repeater** is an electronic device that receives a weak or low-level amateur radio signal and retransmits it at a higher level or higher power, so that the signal can cover longer distances without degradation. See: https://en.wikipedia.org/wiki/Amateur_radio_repeater

Area SKYWARN Trainings

DATE	COUNTY	CITY	LOCATION	TIME
Saturday Feb 22	Denton	Denton	Texas Womans University-MCL 101	8:00 AM - 12 Noon
Thursday Mar 5	Ellis	Waxahachie	TBD	6:30-8:30 PM
Saturday Mar 14	Rockwall	Rockwall	Rockwall County Library	9:00 AM - 11:00 AM
Saturday Mar 21	Tarrant	Fort Worth	TCU Brown Lupton Univ Union Ballroom	8:00 AM - 12 Noon

JOIN THE ARRL

As an ARRL member you support the ranks of thousands of other ham radio enthusiasts shaping the Amateur Radio service today. If you consider yourself an active ham... you need ARRL now. If you are not presently an active ham... let ARRL help you.

As a member of the ARRL, for as little as $49.00 per year, here are some of the benefits you will enjoy:

- *QST* Magazine – your monthly membership journal
- QST online monthly digital edition
- QST Archive and Periodical Search
- Product Review Archive
- Email forwarding
- E-Newsletters – delivered to your inbox
- A voice in the affairs of ARRL and ham radio through locally appointed volunteers
- Publication Specials and on-line course discounts
- Emergency Communication Services
- Technical and Regulatory Information Services
- Operating Awards
- Ham Radio Equipment Insurance Plan Available
- Outgoing Foreign QSL Service

Plus much more!

Take the next step in being an active participant in the future of ham radio. Join the ARRL today!

If you Prefer to Renew by Mail or Phone:

ARRL The national association for AMATEUR RADIO
225 Main Street, Newington, CT 06111-1400 USA
860-594-0200 or Toll-Free 1-888-277-5289

WHAT ARE YOU WORKING ON?

I know that many of us have projects going on that other in the club would love to hear about. Consider writing it up for the newsletter. …

Here are just a few that I know about:

•Greg, John Briggs and John Smyder are working on AREDN projects. Still waiting on that article, guys ;-P
•Mike McCafferty is working on a stealth antenna/weather station and a stealth fox-hunting setup.
•Several people are working on antenna projects, field day set-ups, and other miscellaneous endeavors.
•Several people have been involved in fox-hunting activities.

I would also like to encourage everyone to write a short article about how you became a Ham. Its interesting to know why people become interested and involved with the hobby.

Send your submissions to newslettereditor@sachseradio.org by the third Thursday of the month to be included in the next issue of

SACHSE SKYWAVES !

HAM LEARNING CENTER

2020 MENTORFEST

ARRL North Texas Section
Amateur Radio in North Texas

MENTOR PROGRAM

www.arrlntx.org

Free Event! - Hosted by the Hella Hams and the ARRL North Texas Section
When: April 18, 2020 Time: 9:00am - 4:00pm
Location: Hella Shrine Center, 2121 Rowlett Rd., Garland, TX 75043

The Garland Hella Hams and the ARRL North Texas Section would like to invite all current and prospective Hams to attend Mentorfest! This event is a great way for Hams, especially those recently licensed, to meet and learn about a variety of subjects. Amateur radio operators have a great tradition of helping each other learn about and gain experience in the many facets of the hobby. Mentorfest is designed to build on this tradition by providing a place for Hams of all ages and experience levels to come together, exchange knowledge and make new friends while having fun and enjoying the great hobby of Amateur Radio.

Mentorfest will feature....

- Formal presentations on a number of topics.
- Local clubs providing information on their activities.
- "Elmers" (ham-speak for mentors) available for informal discussions on just about any topic.
- Tours of emergency communications vehicles.
- Representatives from the ARRL, Local Clubs, ARES/RACES, and others showing how you can get involved.

Mentoring

In addition to the formal presentations, mentoring will be available on a large range of topics. Many amateur radio clubs, individual Hams and organizations with ties to amateur radio will be at Mentorfest to answer questions and provide demonstrations in a very informal setting.

If you have something amateur radio related that you would like to show and tell about, please consider attending Mentorfest. Your excitement about a favorite subject might be an inspiration to another Ham. Come share your knowledge and experience. Email mentorfest@arrlntx.org to be a mentor.

Participants & Volunteers

All ARRL affiliated clubs are encouraged to participate in Mentorfest by at least having an information table with club representatives. The ARRL will be promoting Mentorfest to new Hams so there should be opportunities for clubs to recruit new members. If your club or group is interested in participating in Mentorfest, please send E-mail to mentorfest@arrlntx.org. This event is free for everyone!

Volunteers are needed to help will the following tasks.

Parking lot control for EMComm vehicle static displays.

Greeters to help direct attendees to where to get the answers they seek.

Email mentorfest@arrlntx.org to volunteer.

By Jim Eatman, KG5WAW

Learning Morse code can be difficult, but the benefits of operating CW are many. CW typically uses 1/10th the bandwidth of SSB. The added "punch" of a narrowband CW signal makes a 100-watt radio with a wire antenna an exciting proposition. CW signals combined with receivers employing narrow filters drastically improve signal to noise ratio in the noisy HF environment. With the advent of DSPs in radios, these narrow filters are often included in many moderately-priced rigs.

One problem with coming up the curve on Morse code is the lack of slow speed senders with which to converse on the air. Most CW ops have been sending for 40+ years, and their speed is often above 20 words per minute. This makes it difficult to break in as a new CW op. It's like jumping from Little League to the Major Leagues and trying to hit a 100-mph fastball.

Many CW ops will humor a CW novice, and will reduce their speed. One rule of thumb is, don't send any faster than you can receive. Experienced ops (if they are nice) should respond at the speed of the incoming code.

CW decoders are available, but they are not perfect. For the CW beginner, they can be a half-decent crutch until human reading speed improves.

Several CW organizations exist. CWops (CWops.org) and the Straight Key Century Club (skccgroup.com) are two of the more popular ones. These organizations promote the use of CW and can be helpful to new CW operators.

There are CW nets, just as there are SSB (and even AM) nets. CW net rules are similar to SSB nets, with the addition of several net-related Q codes.

CW is a natural for low power ("QRP"; under 5 watt) operations. QRP operation is another field of amateur radio interest with its own organizations and events.

For Technician Class operators, there are limited HF CW privileges on parts of the 80, 40, and 15-meter bands.

It may not be easy to learn CW, but the benefits are many. Make your 100-watt radio work like a 1000-watt radio… or make your 5-watt radio work (at all)… Give CW a try!

Remember books on tape? Well, for those learning Morse code, there is Ebook2CW. Ebook2CW takes any plain text file, and converts it to a Morse code .mp3 or .ogg audio file. Code speed and word spacing can be specified, making this a useful tool for those at any level.

This is a command line program, but there is a separate GUI program to allow easier (more familiar) use. Both must be downloaded to use the graphical user interface.

Read your favorite books and learn Morse code at the same time! Ebook2CW is free… https://fkurz.net/ham/ebook2cw.html

The Sunrise CW Net meets at 7 am CST every morning on 7.123 MHz. This is a great net for CW beginners, since the net tends to operate at reasonable (< 20 wpm) speeds. Even if you don't join the net, listening in is a good practice for reading Morse code. https://qsl.net/srn/

Hella Shrine Temple
5th Saturday
Trade Days & Auto Swap Meet*

*Traditional Garage Sale

2121 Rowlett Road, Garland, Texas 75043

6 am—6 pm

Dates:

February 29th

May 30th

August 29th

October 31st

CONCESSIONS AVAILABLE

$20 per 10' X 20' space, contact Hella Shrine Temple Office to reserve your space at

972-240-6624 or fill out form and mail with your payment to the address above

For more info or questions, visit www.hellashriners.org

Or contact Mike Hall, 972-743-0884, ghall@kllm.com / Bill Caldwell, bblazer1@verizon.net

Proceeds from this event are for the benefit of Hella Shrine and are not tax deductible as a charitable contribution

Undersea Expedition Planned to Retrieve *Titanic*'s Radio Gear

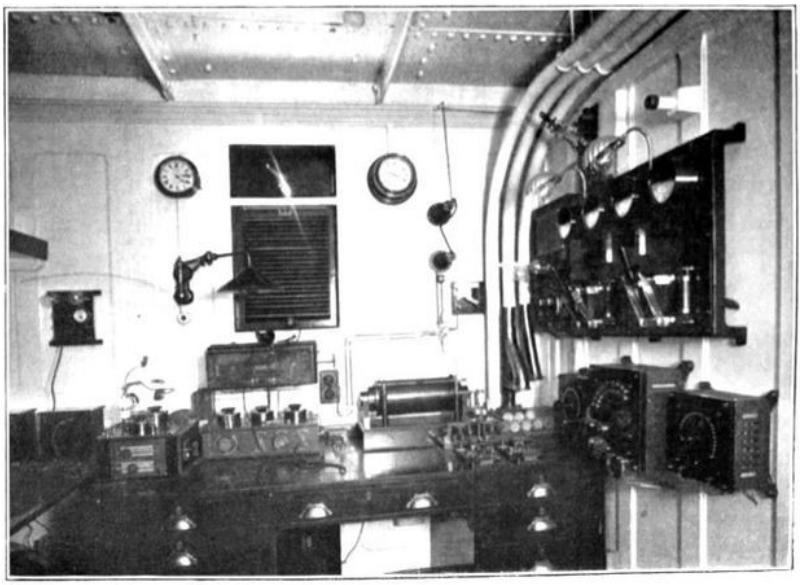
A recreation of the *Titanic* radio room.

The company with sole rights to salvage artifacts from the RMS *Titanic* has gone to court to gain permission to carry out a "surgical removal and retrieval" of the Marconi radio equipment on the ship, a *Washington Post* article reports. The *Titanic* sank in 1912 on its maiden voyage after striking an iceberg in the North Atlantic. As the radio room filled with water, radio operator Jack Phillips transmitted, "Come at once. We have struck a berg. It's a CQD, old man," and other frantic messages for help, using the spark transmitter on board. CQD was ultimately replaced with SOS -- which Phillips also used -- as the universal distress call. The passenger liner RMS *Carpathia* responded and rescued 705 of the passengers.

As might be expected, the deteriorating Marconi equipment is in poor shape after more than a century under water. The undersea retrieval would mark the first time an artifact was collected from within the *Titanic*, which many believe should remain undisturbed as the final resting place of some 1,500 victims of the maritime disaster, including Phillips. The wreck sits on the ocean floor some 2 1/2 miles beneath the surface, remaining undiscovered until 1985.

A just-signed treaty between the UK and the US grants both countries authority to allow or deny access to the wreck and to remove items found outside the vessel. "This momentous agreement with the United States to preserve the wreck means it will be treated with the sensitivity and respect owed to the final resting place of more than 1,500 lives," British Transport and Maritime Minister Nusrat Ghani said in a statement.

The request to enter the rapidly disintegrating wreck was filed in US District Court in Eastern Virginia by RMS Titanic, Inc. of Atlanta, Georgia, which said that it hopes to restore the *Titanic* radio transmitter to operating condition, if it is allowed to go forward.



The company plans to use a manned submarine to reach the wreck and then deploy a remotely controlled sub that would perforate the hull and retrieve the radio equipment.

Originally published in the ARRL Letter: http://www.arrl.org/arrlletter?issue=2020-02-06

COSMIC NOISE

AND SIGNAL TO NOISE RATIO

by Jim Eatman, W5WAW

Cosmic noise, that endless roar that we hear on the HF bands, has plagued HF communications since the beginning of radio. In the early 1930's, Bell Labs was using HF for commercial transatlantic communications. The noise was/is a problem, so they assigned a researcher (Karl Jansky) at Bell Labs in Holmdel NJ to investigate the source(s) of it.

Jansky determined that there were several kinds of noise present. One was "atmospheric noise", generated by local and distant thunderstorms. The other source had a periodic rise and fall, and he discovered that it was coming from the center of the Milky Way. Jansky published the results of his research in 1933.

Several hams followed up on Jansky's work. Grote Reber W9GFZ built the world's first dish radio telescope in his back yard in Wheaton IL in 1937. John Kraus, W8JK, built a radio observatory at Ohio State University. It became operational in 1963.

Cosmic RF noise gets worse at lower HF frequencies, quadrupling in amplitude with every halving in frequency from 28 MHz (10 meters) to 3.5 MHz (80 meters).

So, amateur HF operators are unwitting radio astronomers, and we don't necessarily want to be. For example, if we build a high gain HF antenna, and it happens to point to the center of the Milky Way, it will amplify the cosmic noise and the desired man-made signal at the same time. Thus, the signal to noise ratio may not be improved by the expensive antenna.

There is a way that we can cut the noise down. The received noise is proportional to the bandwidth of the receiver. My old boat anchor receiver (Yaesu FT-250, vacuum tubes, built in 1969) had a single 3.4 KHz filter. This was suitable for SSB, where bandwidths less than about 2 KHz compromise the intelligibility of human speech.

CW is not human speech. It is a narrow band mode (perhaps 200 Hz). My modern radio, with DSP filtering, can narrow the receive bandwidth down to 50 Hz if needed. Using a 50 Hz filter gives you a 40X reduction in cosmic noise over a 2 KHz filter, and a 68X reduction over a 3.4 KHz bandwidth. Using narrow filters, I have "talked" (CW) to a sailboat in the South Pacific, a kayak running QRP in California, and a car in Montana – all with 100 watts of power and an end-fed wire antenna.

HF DX communications are already challenging because of varying propagation conditions. Those challenges are made more difficult by cosmic noise, which roars day and night, and overwhelms weak signals that we would like to hear. CW, combined with modern receivers with narrow filters, enables an almost miraculous reduction in the noise – allowing faint signals to be heard.

But first, you have to learn Morse code. Granted, it's not easy to do, and it takes time. For those who make the effort, though - the rewards are there. CW opens an entirely new world of DX communications to the ham with 100 watts and a wire. It makes HF radio fun on a budget.

"Something Olde, Something New, Something Borrowed, Something Blue, A Sixpence in your Shoe..."

HAM★COM
AMATEUR RADIO CONVENTION

You can purchase your general admission tickets online. You can also purchase general admission tickets at the Ham-Com Box Office on the day of the event. Ham-Com 2020 is June 12th and 13th.

IMPORTANT INFORMATION

- **One General Admission ticket is good for both days of the event.**
- Online registration begins October 1, 2019 and ends May 31, 2020 at 11:59 PM.
- Online general admission tickets for adults are $8. Ticket prices are $10 if purchased at the event on the days of the event.
- Online ticket purchases are NOT mailed! Purchases are to be picked up at the Ham-Com Registration Desk, located in the lobby of the Plano Event Center.
- Children 12 and under get in FREE!
- Scouts in full uniform get in FREE!

Online tickets can be securely paid using your credit card (Visa, MC, AmEx, Disc) through PayPal. You do not need a PayPal account!

https://sites.google.com/hamcom.org/ham-com/registration/general-admission

Hella Hams Amateur Radio Unit
Tail-Gate Hamfest

February 29, 2020
6:00 am – 2:00 pm

2121 Rowlett Road, Garland, Texas 75043

Directions: I-30 to Bobtown Rd exit north to Rowlett rd
Left on Rowlett rd, turn right into Hella Temple Parking lot

Lots of Fun
FREE Parking!!

Space Donation - $20.00 **
(parking space)
Outdoor
TAILGATE SALES

Talk-in Frequency: TBA

For more information, contact:
Bill AC5BC Caldwell
214.500.3472
ac5bc2@verizon.net

SARA Club Officers for 2019-2020

The standing 2018-2019 club officers were re-elected for the coming year with the exception of Jeff Lock, N5LOC and John Abbott, KF5FWK who have stepped down this year.

President	John Smyder, W5JWS
Vice President	Greg Kent, KK6AXF
Secretary	Johnnie Young, KG5CQO
Treasurer	David Mandala, KG5WFS
Public Information Officer	John Briggs, KC6TVF
Director at Large	Mark Mantooth, KI5CYA
Newsletter Editor	Steve Harbin, W5SOT

NEWSLETTER ARTICLES

Working on a project that you think the club members would be interested in? Read a good HAM related article somewhere? Send articles to Steve, W5SOT, at: newslettereditor@sachseradio.org

ACTIVITIES COMMITTEE

SARA vice-president Greg Kent, KK6AXF heads up the SARA Activities Committee. Anyone who is willing to help or has ideas may contact Greg, KK6AXF, at kk6axf@gmail.com.

EDUCATION TOPICS

SARA education director Leroy Michalow, K5AXP, can use your assistance. If you can suggest or provide an educational program for the weekly NET or for the monthly club meeting please contact Leroy at: kf5dat@gmail.com.

SARA BRANDED GEAR

We now have two suppliers for SARA gear. Both of these companies have our logo on file.

HamThreads will do hats, shirts, jackets and vests. They can do single items. HamThreads is in Saginaw.
https://www.hamthreads.com

Cactus Awards is local to Wylie and they specialize in Awards, Trophies, Plaques, Engraving and Embroidery as well as Tee-Shirt printing. Minimum order for some clothing is 3.
http://www.cactusawards.com

SARA NAME BADGES

If you need a SARA name badge please go to:
https://namebadge.com/sachse

WINLINK - Part 2

By Army Curtis, AE5P, Sec/Treasurer, Nacogdoches Amateur Radio Club

Last month we discussed some of what preceded Winlink. This month let's get into Winlink itself.

Winlink as we know it today was developed as a ham radio based messaging system. From the winlink.org web site:

"Winlink is a worldwide radio email service that uses radio pathways where the internet is not present, and is capable of operating completely without the internet-automatically--using smart-network radio relays. Winlink provides its users email with attachments, position reporting, weather and information bulletins, and is well-known for its role in interoperable emergency and disaster relief communications. Licensed Winlink operators/stations use both amateur radio and government radio frequencies worldwide. The system is built, operated and administered entirely by licensed "Ham" volunteers. Support for the system is provided by the Amateur Radio Safety Foundation, Inc., a US 501(c)(3) non-profit, public-benefit entity. Winlink Global Radio Email® is a US registered trademark of the Amateur Radio Safety Foundation, Inc."

The preferred client program most folks use for Winlink today is 'Winlink Express' which is available as a free download from https://winlink.org/WinlinkExpress . One of the really nice features of Winlink Express (actually there are many really nice features of Winlink Express) is the addition of built-in HTML forms.

There have been a number of different Winlink client programs in the past such as Airmail that some of you may be familiar with. Speaking from firsthand experience by all means switch to Winlink Express. It really does do it all, and easily. Let's take a look.

Just follow the instructions on https://winlink.org/ to install and setup Winlink Express or the Winlink client of your choice.

A couple of tips to get you started. Our local Winlink iGate is W5NAC-10, which operates on 145.050 MHz from the roof of the Fredonia Hotel. Operation is simplex. No tones are required. If you have problems accessing W5NAC-10 from your location, try W5IRP-10 in Lufkin on the same frequency.

15 Nacogdoches ARC John Hill KF5VO sponsors a weekly Winlink net every Wednesday. You check into the net by sending a Winlink message to John anytime on Wednesday. He usually sends out a note a day or two before each net with a topic for that week's net. For your first check-in, just leave your comments field blank. John asks that you use a net check-in form to send your message, and it is very easy to do.

Open your copy of Winlink Express and click on 'New Message' (the blank page icon at the far left end of tool bar) to open the "Enter a New Message' window. Now click on 'Select Template', double click 'Standard Templates', then double click 'General Forms' and finally select 'Winlink Check-in.txt'. The form will then open for checking into the Wednesday Winlink Net.

Click to enter date/time, Net Check-in, VHF, Packet. Send to KF5VO, enter your call sign twice. For location I usually enter: Nacogdoches via W5NAC-10 igate. Enter any comments and then hit 'submit'. Follow the instructions and you will be returned to the 'Enter a New Message' window. Click 'Post to Outbox' and you will be returned to the opening window.

On the top line of the opening window, set the flyout between 'Open Session:' and 'Logs' to 'Packet Winlink', then click 'Open Session:'. You will now be presented with the Session Window. Set connection type to 'Direct', then enter the iGate callsign you want to connect to (W5NAC-10), and with your radio connected, turned on and set to 145.050 click on Start. Your system should connect to the iGate station, send your message, and then receive any messages waiting for you. When your screen shows you are disconnected, just click 'Exit' to be returned to the opening screen where you can read the messages you just received.

I know. It sounds like a lot of stuff to remember and go through. The good news is that once you've done it, the computer will remember most of what you entered and you won't have to enter it again the next time. After doing this once or twice, I think you'll find it very quick and easy. As with most things, practice makes perfect and this is the reason for the Wednesday Winlink net. The net gives you a reason to practice your Winlink techniques, and in short order it becomes automatic.

There are at least four of us in Nacogdoches who check into the Wednesday Winlink net each week. You can do it too. Give it a try.

SKYWARN Training

by Steve Harbin, W5SOT, Editor

I know that many of you have been going to the SKYWARN training for years. A guy that I sat next to this year said this was his 24th consecutive year to attend the event. I didn't even know SKYWARN had been around that long. I was surprised to learn that SKYWARN was founded on June 18, 1971. That's 49 years!

SKYWARN is a program of the National Weather Service (NWS). Its mission is to provide "ground truth" of localized severe weather in the United States. These reports are used to aid forecasters in issuing and verifying severe weather watches and warnings and to improve the forecasting and warning processes and the tools used to collect meteorological data. Reports are also used by local emergency managers and public safety organizations. NWS recommends attendance at refresher courses every two years.

I'm not going to try to summarize the training here, you should make

an effort to attend one of the remaining sessions in our area. They are posted on page 5 of this newsletter. I would, however, like to share my perspective on the day.

I enjoy conference settings, the booths with the freebies and cool items for sale, meeting and networking with new people, the general atmosphere. Its like fair day for nerds. I picked up some decals, many of which I probably won't ever use, but hey… they are cool.

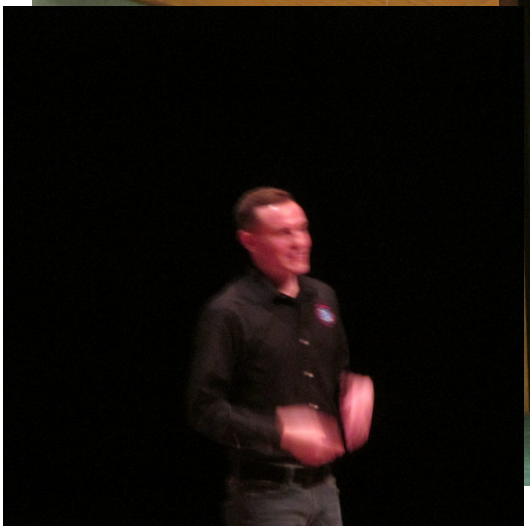
The training itself was surprisingly interesting and energetic. Some people might think spending a day discussing the weather would be about as fun as watching paint peel, but the staff and presenters were very interesting. I learned a lot, in fact. Besides learning what to report (and not report), and where to report it, I was surprised to find out how little I actually knew about how a storm formed, progresses, and what to watch out for. I thought I knew, but I was wrong… how and where a tornado might form, what conditions should be cause for alarm and attention, different cloud formations and how they move.

For me it was a day well spent. They might not have funnel cakes or sausage on a stick, but most of us can't or shouldn't eat that stuff anyway, and my body can't handle most of the rides at the fair. Heck I can't even fit into some of them anymore.

SKYWARN is a worthwhile program and their training events are worth the time and effort. I may not have 24 left in me like the guy I sat next to, but I will be making this a regular event for the foreseeable future.

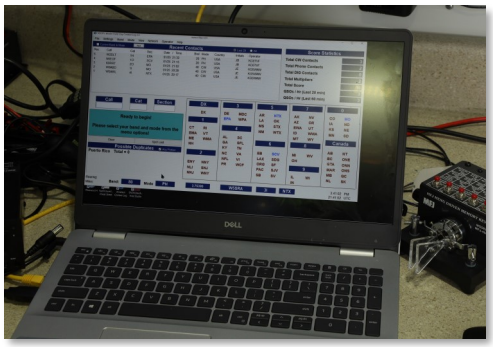
CBS 11 News Meteorologists made an appearance

More SKYWARN Pictures



Winter Field Day

January 26-27, 2020



QSO Breakfast Pictures

You may notice some blank spaces and missing weeks. Yes, your newsletter was very bad this month. But did you know I can use your pictures too?

January 25, 2020

Take this guy, Mike D sitting with me in the picture to the left. He showed up at breakfast on Field Day and turns out he's a professional photographer! Mike took a lot of the pictures for that event in this issue.

February 1, 2020

Mike D. helps his newsletter editor. He takes pictures and remembers to send them in.

Be like Mike!

February 8, 2020

Calling all hams....

MAY 16th and 17th (2-weeks later then usual)

We need RADIO OPERATORS for the Sam's Club MS150 Bicycle Tour

The ride is a 160ish mile cycling journey to raise money to fund the care and the cure for 25,000 Texans affected by Multiple Sclerosis.

https://sites.google.com/site/dfwmsridecomms/ ***INFO WEBSITE!!***

The 2020 Tour starts in Frisco, overnights at Apogee Stadium in Denton and finishes in Ft. Worth at Sundance Square!

Amateur radio operators are needed to provide the critical communication needs that this event must have to succeed. Hundreds of area hams have volunteered over the past 25+ years, and you are needed once again!

Volunteer for both days, or choose Saturday or Sunday. Special SAG will be available to return Saturday only communicators to starting area.

2 meters will be the primary mode of communication, and we need lots of APRS equipment and **are looking for an APRS team lead....**

Please help pass the word.

As we get closer to the event, updates to the Communicator's Website will be available. Register now and make your lodging or camping plans ASAP.

This is a volunteer-lead effort, and I want to extend a BIG thanks to all of the regulars that work this event and a welcome to our 1st timers!

A special thanks to Chadwick, KD5UMO for updating his website with fresh information each year and providing such an easy sign-up tool!

https://sites.google.com/site/dfwmsridecomms/volunteering/sign-up ***SIGN-UP - ALL HAMS and ALL SAGS***

If you prefer the SAG role, PLEASE register at the link above and we will be sure that Tony has your information immediately.

Get your name in the hat and let us know your desired assignment, we will do our best to accommodate. Feel free to email with any questions.

Regards,

James Marple, KB5ZDG
MS150 Communications
j.marple@verizon.net>

Sachse Amateur Radio Association Meeting Minutes

January 23, 2030

Start time: 7:30 pm
Location: Sachse Library
Facilitator: John Smyder (W5JWS) President

Opening
John Smyder (W5JWS) President

Opened the meeting by leading the Pledge of Allegiance

Everyone introduced themselves, gave their call sign and position in the club

Attendees
21 members
0 guests

President's report – John Smyder (W5JWS)

Next board meeting is February 13th
Next general meeting is February 27th, 7:30 pm
New Club call sign – W5SRA
Awards –
Summer Field Day – 2nd place for most contacts
John Findley – W5INF
Event Participation – Attended the most events
Doug Priebe – AG5HB
Silver Mic Award – 2nd place for net participation
Doug Priebe – AG5HB

Vice-President – Gregg Kent (KK6AXF)

Winter Field Day
January 25th and 26th
North Point Church
Arden, 3 radios, CERT Trailer
Bring your new toys to try
Other ideas;
Monthly Simplex Net – invite
CERT
RACES
ARES
Looking to get these groups to participate
Maybe do something over the summer

John Smyder – W5JWS

Co-ordinated Fox Hunt

Maybe have a live fox that moves around
Use an NCS to guide hunters
Presentation on how to do a fox hunt

Secretary – Johnnie Young (KG5CQO)

Minutes for the October meeting are posted on the web site, published in the newsletter and in a folder on the back table
Motion to accept – **Greg Kent (KK6AXF)**
2nd to accept motion – **David Mandala (KG5WFS)**
All agreed – motion passed

Treasurer – David Mandala (KG5WFS)

Financial sheet for January was displayed and reviewed
Jeff Locke – N5LOC asked about the Treasurer's report for November and December since club does not meet for those months
John Smyder – W5JWS it can be amended to include the reports for November and December
Jeff Locke – N5LOC was in agreement with the amendment
Motion to accept – **Johnnie Young (KG5CQO)**
2nd to accept motion – **Linda Smyder (W5LCS)**
All agreed – motion passed

Information Officer – John Briggs (KC6TVF)

Saturday – QSO breakfast @ Woodbridge Cage @ 8:00
Next VE Session – February 8th, Wylie Masonic Lodge
Need volunteers for NCS repeater
January 29th **Jenny Wood – KC5GNI**
February 5th **Rich Lakin – AG5PM**
February 12th **John Smyder – W5JWS**
February 19th **Mark Mantooth – KI5CYA**
February 26th **Lonnie Webb – KG5WHQ**

Simplex Net NCS
February 11th **Johnnie Young – KG5CQO**
February 25th **Lonnie Webb – KG5WHQ**

Newsletter editor – Steve Harbin (W5SOT)

Newsletter was sent via e-mail and is on the SARA web site.
Always can use news articles and recipes
Take pictures at all events & send to the Newsletter editor **Steve Harbin (W5SOT)** at newslettereditor@sachseradio.org

Director-at-Large – Mark Mantooth (KI5CYA)

Nothing to report

Education Officer – John Smyder (W5JWS)

Presented the report
Need help with ideas for future meetings
February – SWR – Jim Eatman – KG5WAW
March – presentation on a coordinated fox hunt
April
May – Field Day Prep
June – Field Day FD 2020 – June 27th/June 28th
July
Aug
Sept – BOD elections

Break: 7:50
Reconvened: 8:10

John Smyder – W5JWS

Repeater Options

Club has a provisional site – North Point Church
VHF coordinated pairs are available based on FCC rules through the FM Society
UHF also requires a coordinated pair
Other assumptions are general items needed for either a VHF or UHF repeater
Presentation showed cost comparison between VHF/UHF, both new and N5LOC repeater – used
All repeaters compared are analog.
An ICOM from the manufacturer is only digital
Yaesu had a program to help in the purchase of theirs, but this has ended

A grant from IARC – Micro Grant is offered to clubs to help with the purchase of new equipment if that equipment is use in the service for the community.

We have this paperwork and it is ready to be submitted paperwork to the FM Society is ready to apply for both a VHF coordinate pair and a UHF pair in case they will only award one pair

Pricing is as follows;

VHF – new -- $4,800
UHF – new -- $3805
VHF – used -- $2710
Yaesu – new -- $5505

Grant can be up to $1500
Can maybe do a Go Fund Me page

Members discussed these options and the consensus was it was time for the club to get a club repeater and that the club should request a coordinate pair

If the club wanted to apply for the grant a decision was needed concerning which type of radio to purchase

Steve Harbin - W5SOT made a motion to approve the board to apply for the Micro Grant and to move forward on the UHF system ($3805), provided the club receives at least $1000 from the Micro Grant
Doug Priebe – AG5HB 2nd the motion
All approved – motion passed

David Mandala – KG5WFS made a motion to allow the board to start Go Fund Me page using the 501 C3 option to raise money towards the repeater and the cost of general items needed
John Findley -- W5INF 2nd the motion
All approved – motion passed

Motion to close the meeting – **Linda Smyder – W5LCS**
Motion 2nd – **David Mandala – KG5WFS**
All approved

Meeting adjourned – 9:10 pm

Sachse Amateur Radio Association Weekly Repeater Net Script

Version: 5.0 - October, 10 2019

Good evening and welcome to the "*Ham Radio in Sachse*" Weekly Information Net. My name is (*name, call sign*), and I will be your net control this evening. (***pause)*** This net is heard every Wednesday evening at 8:00pm on the N5LOC repeater, which is on a frequency of 145.250 using a PL tone of 141.3. All licensed amateurs are invited and encouraged to participate, whether you are a club member or guest. (***pause)***. This is a Directed Net. Please do not transmit unless directed to do so by Net Control. If at any time, you have an emergency to report, break in by saying "Priority" or "Emergency" followed by your call sign and the net will stand by. An emergency is defined as the imminent threat to life or property. **Is there any emergency, priority or time sensitive traffic at this time? *Pause***

Check-Ins:
Before we begin, we will be taking check-ins, three at a time. If you would like to check into this net, please give your call sign phonically, your name and repeat your Call Sign alphanumerically slowly, so Net Control can write it down. (*write down and read back call signs of check ins*). (Remember: Echo Link users (if any) need a few extra seconds to respond).

Club Announcements: ***Now is a good time for Net Control to ID.***
Our first topic will be announcements from club officers. Any club officer on the net with an announcement, please give your call sign now.

Member & General Comments: ***Now is a good time for Net Control to ID.***
Our next topic is member & general comments. Any member of the Sachse Amateur Radio Association, or anyone else on this net, who would like to make a comment, please give your call sign now.

Tech Talk: ***Now is a good time for Net Control to ID.***
Our next topic is Tech Talk. Ask any questions you may have of a technical nature regarding amateur radio or computers. Feel free to share any information or share comments that you find to be valuable with the group. If anyone has an item for Tech Talk, please give your call sign now.

Swap Shop: ***Now is a good time for Net Control to ID.***
Our next topic is Swap Shop. Anyone wishing to buy, sell, trade, or give away items related to ham radio or computers is invited to do so. Please do not haggle over price on the air. If anyone has an item for Swap Shop, please give your call sign now.

Education: ***Now is a good time for Net Control to ID.***
Our next topic is Education. Anyone who has an education presentation they would like to make or want to suggest an item for a future presentation, please give your call sign now.

How Was Your HAM Week: ***Now is a good time for Net Control to ID.***
Now for the fun part of our hobby, which our next topic is called "***How Was Your HAM Week***". This exercise allows any station to share anything related with HAM Radio, since our last Net Control or Monthly Meeting. Example topics can be "DX'ing Observations", "Experiences", "Challenges", "Lesson-Learn with your equipment", or even "Victories on a project". The goal of sharing is to forge relationships, as we are currently enjoying the hobby. Whether you are a member or guest, this exercise is voluntary. No station is under obligation to share anything. As your Net Control, I will start by briefly sharing my "Ham Week". Once done, I will then ask if any station would like to share their "Ham Week". Simply give your Call Sign and Net Control will recognize the station and give you the platform to share.
(*Net Control – provide positive feedback on their topic.)*

Late Check-Ins: ***Now is a good time for Net Control to ID.***
Next Net Control would like to take late check-ins. If there are any late check-ins, whether RF or Echo Link, please give your call sign and name slowly and clearly. (*write down and read back each call sign*).

Last Call:
Before we conclude the net, is there any other Stations wishing to report into the Net and/or have any comments?

Wrap-Up: ***Now is a good time for Net Control to ID.***
This concludes the "Ham Radio in Sachse" Weekly Information Net. If you would like more information about the Sachse Amateur Radio Association, please visit our web site at www.sachseradio.org. This is (*call sign*) and we now return the N5LOC repeater to its normal use.

Sachse Amateur Radio Association Simplex Net Script

Version: 5.0 - October 10, 2019

Good evening and welcome to the "*Ham Radio in Sachse*" Simplex Net. My name is (*name, call sign*), and I will be your net control this evening. This net can be heard every 2nd and 4th Tuesday evening at 7:30 pm on a frequency of 146.40 Simplex. Therefore, there is no need for an offset or PL tone. All licensed amateurs are invited and encouraged to participate, whether you are a club member or a guest. This is a Directed Net. Please do not transmit unless directed to do so by Net Control. At the end of check-ins, I will ask for relays of check-ins I acknowledged, that you did not hear, and check-ins that I did not hear. Near the end of the program, I will ask for a signal report. If at any time, you have an emergency to report, break in by saying "Priority" or "Emergency" followed by your call sign and the net will stand by. An emergency is defined as the imminent threat to life or property. **Is there any emergency, priority or time sensitive traffic at this time?** ***Pause - hearing none…***

Check-Ins:
We will start by taking check-ins, three at a time. If you would like to check into this net, please give your call sign phonically, then your name, and then your call sign alphanumerically, so Net Control can write them down. Please come now in groups of 3.
(*write down and read back call signs of check ins*).
When there are no more check-ins, go through the list and ask if anyone heard a check-in that you did not acknowledge or if there is a check-in that they did not hear.
You may have to pick a relay person for the night.
If you had to pick a relay person or persons, then remember to stop after each conversation and have the relay person pass that information on.

Club Announcements: ***Now is a good time for Net Control to ID.***
Our first topic will be announcements from club officers. Any club officer on the net with an announcement, please give your call sign now.

Member & General Comments: ***Now is a good time for Net Control to ID*.**
Our next topic is member & general comments. Any member of the Sachse Amateur Radio Association, or anyone else on this net, who would like to make a comment, please give your call sign now.

Tech Talk: ***Now is a good time for Net Control to ID*.**
Our next topic is Tech Talk. Ask any questions you may have of a technical nature regarding amateur radio or computers. Feel free to share any information or share comments that you find to be valuable with the group. If anyone has an item for Tech Talk, please give your call sign now.

Education: ***Now is a good time for Net Control to ID*.**
Our next topic is Education. Anyone who has an education presentation they would like to make or want to suggest an item for a future presentation, please give your call sign now.

Signal reports: ***Now is a good time for Net Control to ID*.**
Next, we will discuss signal reports. How does net control and/or the check-ins come across. I will go down the list of check-ins so everyone can give a response. Please use the plain language radio checks provided on the Sachse Radio web page.
(For example; net control was loud and clear.) Also please include your power level at the end of you signal report.
(You start.)

Late Check-Ins: ***Now is a good time for Net Control to ID*.**
Next Net Control would like to take late check-ins. If there are any late check-ins, please give your call sign and name slowly and clearly.
(*write down and read back each call sign*).
Remember to ask if there are any check-ins you did not acknowledge or check-ins that others did not hear.

Last Call:
Before we conclude the net, are there any Stations wishing to report into the Net and/or have any comments?

Wrap-Up: ***Now is a good time for Net Control to ID.*** This concludes the "Ham Radio in Sachse" Simplex Net. If you would like more information about the Sachse Amateur Radio Association, please visit our web site at www.sachseradio.org. This is XXXXXX and we will now return this frequency to its normal use

Do you need to join or renew your membership in the Sachse Amateur Radio Association?
Print this page, fill it out, and bring the form to the next club meeting.
Sachse Amateur Radio Association Membership Application

Sachse Amateur Radio Association Sachse, Texas 75048-3696 www.sachseradio.org kf5nbo@gmail.com

Type of Application: New Member ☐ **or Renewal** ☐ **Date:**_____

Your Call Sign:_____ **Your License Class:**_____

Your Name:_____ **Spouses Name:**_____

Address:_____

City:_____ **State:**_____ **Zip:**_____

Home Phone:_____ **Work Phone:**_____

Cell Phone:_____ **Email:**_____

Membership Types: Please check only one option below:

☐ **Regular:** A regular member shall be any FCC licensed amateur radio operator who does not fall under the special provision of an associate or student membership. Regular member dues are $25.00 per year unless prorated (see below).

☐ **Family:** A family membership shall be any FCC licensed amateur radio operators and non-licensed family members interested in amateur radio who live in the immediate household. Family member dues are $30.00 per year unless prorated (see below).

☐ **Associate:** An associate member shall be any person maintaining membership to support the association but who does not hold a license as a radio amateur. Associate member dues are $10.00 per year and are not prorated.

☐ **Student:** A student member shall be any FCC licensed amateur radio operator who is currently enrolled as a full time student, is 18 years of age or younger, and is not otherwise eligible to be included in a family membership. Student member dues are $10.00 per year and are not prorated.

If selecting Family membership, please list the family members covered by this application.

Name:_____ **Email:**_____ **Call Sign (if any):**_____ **Lic Class:**_____

Name:_____ **Email:**_____ **Call Sign (if any):**_____ **Lic Class:**_____

Membership Dues: (Please check only one)

Dues are initially paid upon joining the association. Renewal dues are paid no later than the September meeting each year. A new application must be submitted each year as well. Dues are reduced (prorated) for Regular and Family members (only) who join or renew their membership after Dec 31st:

☐ Joining Sep 1 thru Dec 31, pay $25.00 for Regular dues, or $30.00 for Family dues.
☐ Joining Jan 1 thru Mar 31, pay $18.75 for Regular dues, or $22.50 for Family dues.
☐ Joining Apr 1 thru Jun 30, pay $12.50 for Regular dues, or $15.00 for Family dues.
☐ Joining Jul 1 thru Aug 31, pay $6.25 for Regular dues, or $7.50 for Family dues.

TOTAL DUE: $_____

Are you a current member of the ARRL? ☐ YES or ☐ NO (please chose one).

By submitting this application, either by hand or any electronic means, you hereby agree to abide by the rules and regulations of the Sachse Amateur Radio Association.

Signature:_____